Near Space Fills Communications Gap

November 2005 - By Maryann Lawlor

Members of the 13th Air Support Operations Squadron launch an AN/PRC-148 payload during test flights prior to the Combat SkySat demonstration in March. The tests helped determine the ideal operational altitudes for the radios.

Extended connectivity emerges out of thin air.

The combination of a low-tech platform and a high-tech radio is extending beyond-line-of-sight communications from 10 miles to more than 400 miles. The approach employs small hydrogen balloons that are sent into the near-space realm—defined as from 65,000 feet to 325,000 feet above Earth—toting two AN/PRC-148 radios that relay ground-to-ground, air-to-ground and ground-to-air voice and data communications. Although the capability was developed to address a combat-mission need statement and is scheduled to be deployed to theaters of operation in December, the benefits of this technique also could extend to homeland security as well as emergency relief efforts such as assistance in the aftermath of Hurricane Katrina.

The U.S. Air Force Space Battlelab, Schriever Air Force Base, Colorado, began exploring the prospect of using the near-space realm to extend military communication capabilities two years ago when it invited experts from academia, industry and the military to share information about their work in this field. Col. Patrick P. Rhodes, USAF, commander of the battlelab, relates that the inquiry revealed that commercial applications already were underway as was research and development of different types of vehicles and sensors. Encouraged by the data from these efforts, his organization began pursuing the work as a way to fill a gap in military over-the-horizon communications.

“The mission we were attacking was the needs of the tactical air control parties [TACPs]—the guys who are on the ground. The TACPs have to have line of sight with airplanes and/or their fellow ground members to communicate with a handheld PRC-148 radio. We said, ‘Let’s see if we can shorten the time chain for passing information.’ So we took a couple of PRC-148 radios, pretty much duct-taped them together and made them a trans-receiver if you will,” Col. Rhodes explains.

Space Data Corporation, Chandler, Arizona, provided the maneuverable platform to transport the radios into near space: hydrogen-filled latex balloons that are approximately 10 feet in diameter and a 6-pound payload that includes the vetting and ballasting equipment, a parachute and a tracking device. Free-floating balloons travel at the whim of the wind, and

the company spent substantial time on vetting and ballasting systems research and development so ascent and descent could be controlled. As a result, the platform can be positioned at an altitude where wind speed is minimal, which is in the 80,000-foot range, and remain there.

Persistent connectivity can be accomplished by a technique called constellation replenishment, Col. Rhodes explains. “Depending on the winds aloft, your area of regard may be traversed by the balloon in from 3 to 12 hours. So if the current balloon is beyond the area that you’re interested in, you launch another balloon. These balloons last, and in the commercial effort in Arizona, they launch an average of around three balloons a day, twice a day,” he says.

When connectivity cannot be maintained or is no longer needed, a parachute-release system brings the radios to Earth where they may be recovered. Free of the weight, the balloon ascends until it bursts just like a weather balloon. However, work is currently underway on a new recovery system that involves a glider that could be programmed to deliver the radio or sensor payload to a specific location.

To examine the feasibility of the radio-bearing balloons in military applications, the battlelab conducted a proof of concept demonstration in March called Combat SkySat. Lt. Col. Richard A. Lane, USAF, director of initiative demonstrations, Air Force Space Battlelab, explains that the battlelab team chose the AN/PRC-148 radio because it weighs less than 2 pounds and the bandwidth range is from 30 to 512 megahertz. Thales Communications Incorporated, Clarksburg, Maryland, manufactures the radios. Space Data can package two radios into a payload that weighs less than 6 pounds, which facilitates coordination with the Federal Aviation Administration.

“Space Data has their own repeater in the 900-megahertz range, and the [circuit] card weighs ounces versus 5 pounds for two PRC-148s. So that’s how we see the future: an even more disposable circuit card versus full-blown flying two radios hooked together,” Col. Lane offers.

Prior to Combat SkySat, the battlelab team conducted eight test flights because the AN/PRC-148 had never been used at high altitudes and the team was concerned it might not operate in the thin-air environment. Although performance was good, some overheating took place in the 95,000-foot range, the colonel says, so the engineers decided to keep the balloons in the 65,000- to 75,000-foot range for the demonstrations.

Three communications scenarios were explored during the three-day event: ground to ground, air to ground and ground to air. Several communications bands were examined, including AM, FM, ultrahigh frequency and very high frequency. Both secure and nonsecure modes also were studied.

Four teams traveled from Phoenix: One headed west toward San Diego; one traveled east toward Deming, New Mexico; one went north toward Flagstaff, Arizona; and one proceeded

south toward the Mexican border. The demonstration proved that connectivity could be extended from the usual 10 miles for line-of-sight communications in that type of terrain to more than 400 miles. “Also, it doesn’t matter how many operators you have on that network. You could have 100 operators on there and they’re all using that communications frequency relay, and everybody would be connected in that particular footprint,” Col. Lane notes.

The colonel admits that even the battlelab staff did not expect to be able to maintain the communications link at a distance of 400 miles. The radios were used at a relatively lower power setting, 3 watts, and Thales estimated that the theoretical communications range at that wattage would be around 300 miles. “We think we could have pushed much, much farther, but we had teams going all the way toward San Diego so we were limited and kept it at that footprint,” he relates.

To assess communications quality, the battlelab team used four categories: loud and clear, good and readable, weak but readable, and weak and unreadable. Even at more than 400 miles, the signals were still good and readable, Col. Lane says. Shadowing resulted in weak and unreadable signals, he adds, but this is the same problem that satellite communications systems encounter, and operators collected data so the issue could be reviewed.

In addition to the ground teams, the effort showed how radio-equipped balloons can support tactical air patrol parties. A-10s, F-16s and Joint Surveillance Target Attack Radar System aircraft were employed, and the battlelab team proved that not only were air-to-ground and ground-to-air communications possible but also users on the ground could communicate with aircraft on the ground. This is “a very nice capability,” Col. Lane says, because personnel can communicate with an aircraft while it is stationed on a runway. This capability is especially beneficial for the A-10 that relies on ultrahigh frequency communications, he notes.

The team also operated in secure mode for the air-to-ground link, and because the radios on the balloons are only repeaters, cryptology equipment is not necessary. “So if we don’t get them back, for whatever reason, it’s not as big a deal as if you’re flying actual crypto material,” the colonel offers.

Ron Irwin, senior systems engineer, Scitor Corporation, worked with the battlelab on the demonstration, and he emphasizes how this technique supports operational responsiveness. “With satellites, you can’t decide that you’re going to launch another satellite right now,” he says. “And we’re just touching on the capabilities of this kind of technology. This is a capability that the field commander doesn’t have to ask anybody’s permission to use. He just floats communications whenever he needs to and at a price that’s so cheap it’s going to revolutionize beyond-line-of-sight communications.”

Col. Rhodes reiterates the importance of this capability to current operations. For example, convoys driving through Iraq may be 18 miles long. Unless transmitters are located in the middle of the convoy, the warfighters in the front vehicles cannot communicate with those in the back. “If we can give these guys an opportunity to

maintain their situational awareness and command and control and a convoy can then communicate back to the headquarters that might be a couple hundred miles away, I think everybody will benefit," he says.

For Combat SkySat flights, Space Data Corporation's payload, which includes a tracking device, parachute and tethering system, was integrated with two AN/PRC-148 radios set to the repeater mode.

Although Combat SkySat was a success, members of the battlelab already are looking to the future. The colonel points out that while using a balloon as a platform has several advantages, there is still room for improvement. Persistence is one problem the team is still trying to solve, for instance. Free-floating balloons are only as persistent as winds allow. When a vehicle is developed that can maintain stationkeeping in near space, it will be a significant breakthrough, he states.

The potential for commercial uses for near-space communications will likely drive continued improvements. The technique already is being used commercially in Texas and Oklahoma to provide information about gas and oil sites, and Space Data plans call for the applications to expand to the telecommunications industry. For example, Irwin says the company is exploring a concept it calls "cell tower in the sky." The firm's long-term business plan is to provide cell phone coverage to every square inch of the continental United States. While large companies may not be interested in installing cell towers in rural areas that service only a few customers, Space Data sees potential in the market.

And ability to service a handful of users has military applications as well, Col. Rhodes points out. Teams of special operations forces need the ability to communicate, and the near-space approach is one option, he states.

Other possible applications for the capability include homeland defense or disaster relief. Although the battlelab's primary mission is to determine whether commercial products can fill a military requirement, Col. Lane says his team has discussed how near-space could assist in the aftermath of tragedies such as Hurricane Katrina. "The communication infrastructure is just not there for everyone going into the area. We're looking at the military application, but as far as homeland security and other types of applications, this payload could be launched and could provide communications to hundreds of first responders with a very small logistical footprint. So we're working with those other agencies outside the U.S. Defense Department because we see the capability for the military application, but we also see huge application for border patrol and scenarios like the events following Hurricane Katrina," he states.

Maj. Steven G. Staats, USAF, deputy director, initiative demonstrations, Air Force Space Battlelab, agrees that the applications for this capability are far-reaching. While satellite communications enable connectivity at the strategic level, the capability demonstrated during Combat SkySat will be useful at the tactical level. "When you look at the overall communications need, whether it's the Defense Department or the Department of Homeland Security, there's an integrated approach, and you have to identify the effect you need and then identify the system to provide it. This will be one of those systems in your quiver that

you could choose to meet particular needs," the major says.

Col. Rhodes agrees. "We see this fitting in very nicely as a subset of the Joint Warfighting Space concept in that we're able to bring space effects to the tactical and operational level of war, which will relieve our strategic assets from doing those kinds of missions so they can do what they've been designed to do. Right now, they're over-tasked and we can't get enough UAVs [unmanned aerial vehicles] in the air to provide all the information that we want on the battlefield. So as we do our battlefield preparations, we see near-space assets as filling a part of that overarching concept of bringing space effects to the warfighter," he states.

In addition to voice communications, Maj. Staats relates that data can be relayed. The AN/PRC-148 can support data rates equivalent to a telephone modem. During the demonstration, the battlelab team showed that mapping data could be relayed from the TACPs using handheld devices. Currently available systems can relay information at considerably higher speeds, he says, and the battlelab is examining how to relay streaming video in the future.

Plans for the future also call for exploring other types of sensors that could be flown into near space. The battlelab expects to examine these during fiscal year 2006. In addition, near-space capabilities will be part of Joint Expeditionary Force Experiment 2006 next spring.

Col. Rhodes emphasizes that not only is the system joint but so is the effort to develop near-space capabilities. The Air Force Space Battlelab started its efforts in this arena by working with the U.S. Army Space Battlelab. It later found out that the U.S. Navy was exploring the topic. As a result, the Joint Near Space Council has been established and currently includes representatives from the Air Force, Army, Navy, Coast Guard and U.S. Special Operations Command. Throughout late summer and early fall, the group worked out memorandum of understanding details, the colonel says, to delineate responsibilities and ensure members are not unnecessarily duplicating efforts. The council's first meeting took place in August, and the next meeting is scheduled to occur this November.

Web Resources
U.S. Air Force Space Battlelab: www.schriever.af.mil/battlelab
Space Data Corporation: www.spacedata.net
Thales Communications Incorporated: www.thalescomminc.com/section_about_us.asp

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SIGNAL Magazine
http://www.afcea.org/signal/

Military testing balloons as communications option

BY JONI MORSE

Balloons as communications tools? Of course, says Chandler, Ariz.-based Space Data Corp.

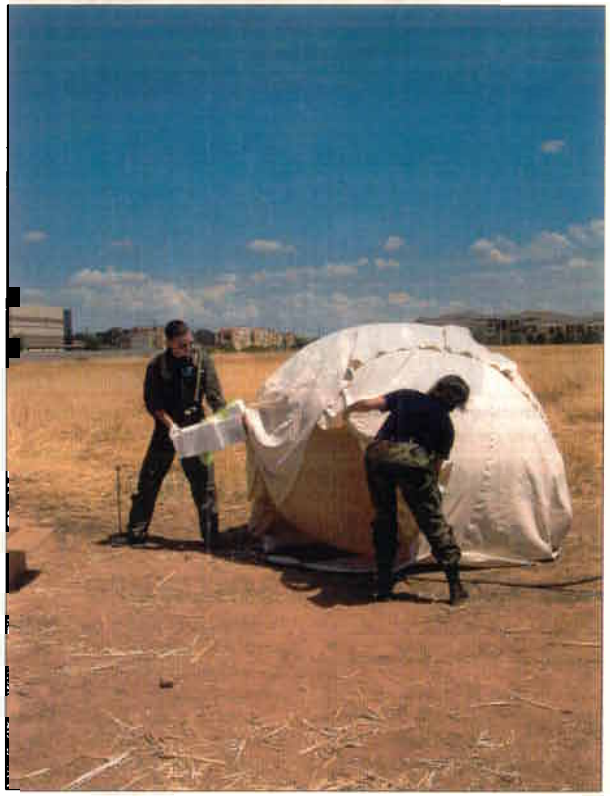
In late August, the Arizona National Guard's 111th Space Operations Squadron and staff from developer Space Data demonstrated Combat SkySat, a balloon-borne communications system.

The military was sufficiently impressed during the trials—Space Data won a $1.4 million contract to participate in the upcoming Joint Expeditionary Force Experiment, which the military uses to assess new battlefield innovations. The event takes place under the auspices of the Air Force Joint Chief of Staff and combines live flight, ground and naval forces to simulate a war-fighting environment.

The helium-filled balloons serve as floating towers, carrying radio equipment to an area called "near space," which is the space between 12 miles and 62 miles above sea level, above where airplanes fly, but below where satellites are stationed. From the ground, they can't be seen, except during launches and retrievals.

Once the 6-foot-wide balloons are in place, they expand traditional line-of-sight radio communications from about 10 miles to more than 400 miles of coverage.

And this wildly expanded coverage costs $5,000 to $25,000 per off-the-shelf balloon. Col. Patrick Rhodes of the Air Force Space Battlelab at Schriever Air Force Base in Colorado said the cost could get even cheaper, down to between $1,000 and $5,000, if the military enters into a mass production scenario.



A Combat SkySat balloon is prepared for launch. The 6-foot-wide helium balloon will serve as a floating tower greatly expanding the reach of line-of-sight radio communications coverage.

Battery power for the balloon's radio system lasts about 10 hours, at which point the balloons can either parachute back to the ground and be located via global positioning system technology or they can be programmed to self-destruct, whichever is most palatable for the mission at hand. Once retrieved, balloons can be loaded with fresh battery power and can be relaunched.

The balloons already are in use by oil and gas companies in Texas, Oklahoma and New Mexico.

Col. Rhodes said the Air Force is looking into how the technology could be used in tactical situations, such as close-air support, convoys and special operations missions. Col. Rhodes also said that other branches of the military are briefed on the progress of balloon technology during quarterly meetings where technology gurus from all branches of the military gather to share information about new and emerging technologies.

SpaceData said the Arizona branch of the Department of Homeland Security is interested in how the balloon technology could apply to border patrol communications in the southwestern United States, a region where coverage is sparse, as are funds for improvements.

And in the wake of massive communications failures in the Gulf Coast region during and after Hurricane Katrina, imagine the possibilities of balloon technology. Both Col. Rhodes and Space Data executives said their people are in talks with the DHS.

"It's ironic, because the day after the hurricane hit, we held a graduation ceremony for the 111th, who had just gone through our training program, and all we could talk about was how useful this would have been for the people in the Gulf Coast area," said Mark Davis, director of marketing at Space Data. "We immediately started making lots of phone calls, and we've gotten expressions of sincere interest. We're confident that we'll be well positioned to help keep communications flowing the next time a major hurricane comes through."

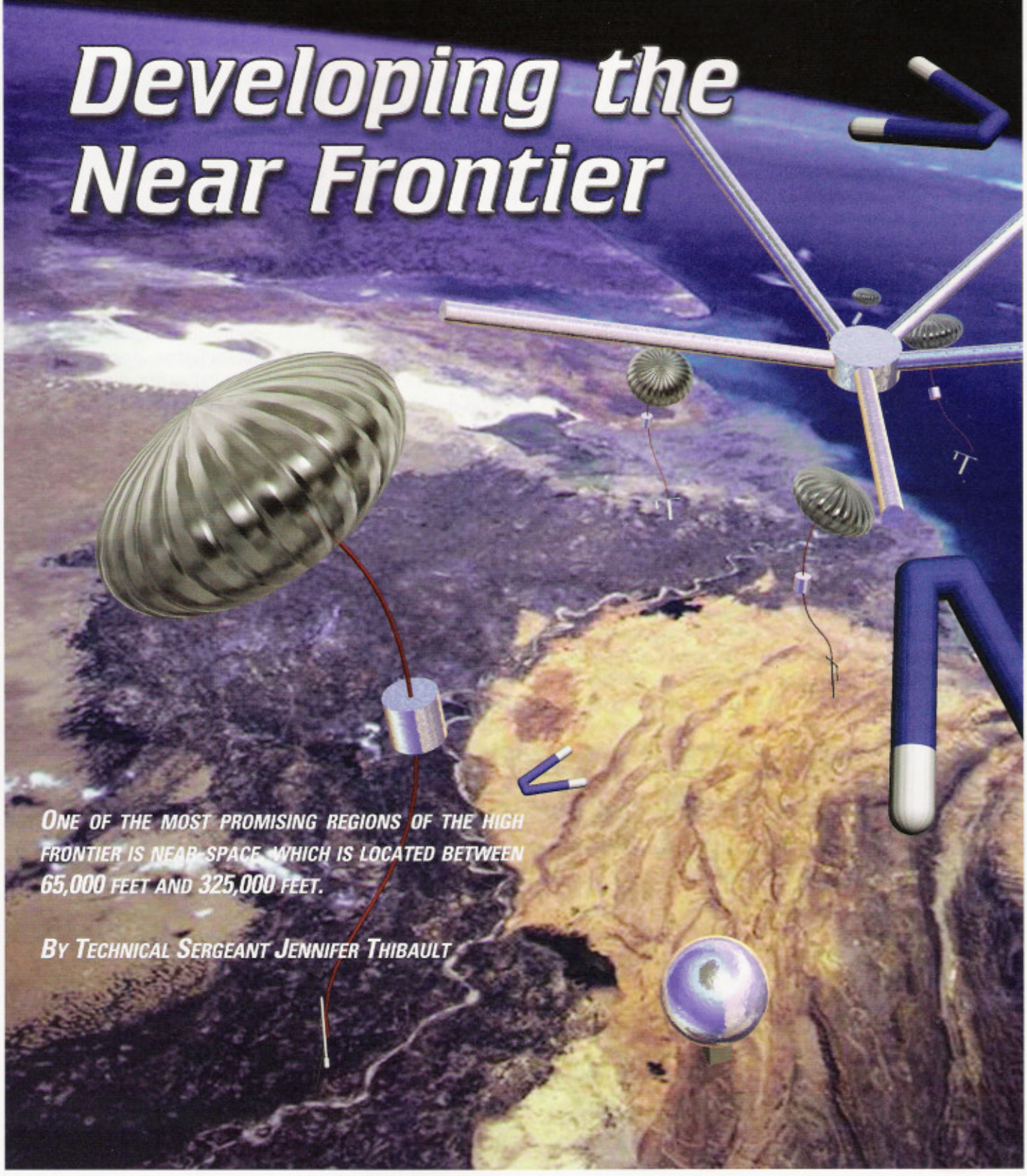
Davis went on to explain that severe weather doesn't necessarily interfere with the balloon's ability to provide communications because the balloons are stationed in near space, which is far enough above Earth to avoid the pitfalls of weather interference. Though it probably would not be possible to launch the balloons during a storm, they can be launched either before the inclement weather begins, or away from the inclement weather, up to 350 miles away from their ground stations, equipped with high-gain antennas.

For the military, the company is providing a turnkey system, including the network equipment and training. For other commercial clients, Space Data runs a network based on the client's needs.

The engineering team at Space Data still is hard at work developing the next phase of balloon technology.

"The balloons can be an overlay system for wireless networks," said Jerry Quenneville, vice president of engineering at Space Data. "About 20 percent of the population doesn't have access to digital voice communications because the carriers don't have a cost-effective way of providing coverage to rural areas. Imagine what would happen if there was a cost-effective way to provide coverage. For one thing, the carriers would have a significant boost in their earnings." RCR

Developing the Near Frontier



One of the most promising regions of the high frontier is near-space, which is located between 65,000 feet and 325,000 feet.

By Technical Sergeant Jennifer Thibault

As Air Force Space Command (AFSPC) furthers its utilization of the high frontier, it's looking for persistence that doesn't have to reside quite so far out of this world. The command is focusing on developing programs that will operate in the near-space region, which is located between 65,000 feet and 325,000 feet.

The driving force behind the exploration of near-space programs is feedback from combatant commanders on space capabilities. In theater, combatant commanders say space capabilities need to be more tailored and responsive to meet their needs. In response, General John Jumper, then Air Force chief of staff, directed AFSPC to start looking at joint warfighter space (JWS) initiatives, including near-space projects.

Jumper assigned AFSPC the responsibility for executing all tactical and operational responsive space capabilities through the space and the near-space mediums. "JWS takes the next step in transforming capabilities by operationalizing space directly to the benefit of the warfighter with an agile, responsive, commander-oriented, combat space vision focused primarily at the tactical and operational levels of war, but able to integrate

The 175-foot-long, V-shaped Ascender airship within JP Aerospace's hangar. The propeller-driven craft is filled with helium and is designed to rise to altitudes beyond 100,000 feet. [JP Aerospace photo]

with the [National Security Space] architecture," he stated.

The initiative requires space warfighters to integrate space-based capabilities in the tactical and operational levels of war in direct support of the joint force commander. The command anticipates meeting this near-term need with responsive near-space platforms operating communication and intelligence, surveillance and reconnaissance payloads. AFSPC will take immediate action to create warfighting capabilities that improve effects and situational awareness on today's battlefield.

"With our current space capabilities, it's not that the information isn't available; it's just that relevant battlespace awareness doesn't always reach our forces," said Lieutenant Colonel Ed Herlik, who is with the AFSPC Joint Warfighter Space division. "With near space, we believe we can provide persistence, payload and deterrence."

An in-theater example sighted by combatant commanders is that blue forces on the ground using line-of-sight radio communications are limited to a footprint of approximately five to seven nautical miles. One of the near space projects currently in the demonstration phase uses communication relay to extend the range of those radios out to nearly 300 nautical miles.

The capability would have a wide range of applications, such as close air support. Today, during close air support missions, the joint tactical air controller (JTAC) transmits information from a ground radio, which may then be funneled through other aircraft before it reaches the strike aircraft. The demonstrated near-space capabilities can provide communication relay, allowing the JTAC to give the briefing to the aircraft well over the horizon, thus decreasing the time the aircraft would have been in range

Sky-High Communications

A more robust communications infrastructure is key to the success of a Global Strike Task Force, Air Force officials have stated.

This includes the capabilities for increased communications coverage, targeting data, location information, mapping files and imagery. The need to be able to quickly deploy forces from the continental United States to some overseas battle areas also requires communications, and command and control infrastructures that can be assembled in a minimum amount of time.

As the world threat has evolved, so has the military's requirement for having a communications platform that can be easily deployed with little notice and on an as-needed and where-needed basis. Space Data Corp.'s (SDC) military system, dubbed the Combat SkySat Platform, has evolved to meet these demands and the ever-changing security threat our country faces.

The Combat SkySat Platform is basically an adaptation of SDC's commercial SkySite Platform, an aerial wireless communications network. It enables two-way voice and data communications in geographic regions that are poorly served by existing wireless technologies and services. The SkySite Network simply lifts wireless transceivers into the stratosphere (somewhere between 80,000 feet and 130,000 feet) using industrial balloons to allow low- to medium-rate two-way data communications across a wide area. Although weather balloons have provided critical meteorological data to weather stations worldwide for more than 60 years, SDC was the first to adapt this simple yet reliable concept for commercial communication services.

SDC's Combat SkySat Program, initiated by an Air Force Space Battlelab contract, was designed to demonstrate the ability of a balloon-borne repeater to extend radio communications beyond the line of sight. The Combat SkySat System was tested in the UHF band using AM and FM modulation schemes. Voice testing incorporated analog and digital transmission methods, and the digital voice tests used both secure and nonsecure links. These tests used military hand-held radios, PRC-148 urban-variant.

PRC-148 radios typically offer a seven- to 10-mile range on the ground. Testing in Arizona with the Air Force showed that the Combat SkySat Repeater System increased range up to 400 miles. In addition, successful tests were accomplished that allowed ground troops direct communications with pilots in the air.

The increased range of communications is not the only advantage of using the Combat SkySat Platform. The launching of a SkySat payload requires only one person per launch. The payloads can be launched and controlled from any field location and for just about any tactical mission.

COTS and currently available military hand-held radios can interoperate with SkySat communication applications. SkySat platforms also offer relatively low-altitude imaging capabilities previously only possible with aircraft-based or satellite-based capabilities. The integration of inexpensive and commercial imaging products can be used for SkySat imaging applications.

The relatively low cost Combat SkySat Platform offers numerous command, control, communications, intelligence and reconnaissance capabilities that can greatly assist our forces both at home and abroad with threat assessment and gathering and disseminating vital information. Since the SkySat infrastructure already has command and control capabilities, just about any terrestrial communications technology can be adapted for use on a SkySat Platform. The system is able to maintain altitudes of up to 130,000 feet carrying platforms weighing as much as 30 pounds. Although satellite communications can provide the warfighter with the necessary coverage, they were not designed or built with the new threats we face every day in mind.

In these days of budget concerns and weapons system cost increases, it is a major victory that a low-cost, easily deployable and sustainable communications capability is available to help today's warfighter.

Heidi Alvarado Mahoney is deputy program manager for Space Data Corp.

of enemy fire.

"[Near space capability] will provide dedicated communication where it's currently nonexistent," said Lieutenant Colonel Toby Volz, chief of the Joint Warfighting Space division. "We can provide communication to folks in theater to use when and where it's needed. It's directly in the hands of the warfighter."

Although near-space project development has been previously unexplored by the military, civilians have been making use of it for more than a year. Commercially developed platforms have been used in Texas and Oklahoma to provide information on gas and oil sites throughout the states.

"Platform operations in near space can give space-like effects without a lot of the space disadvantages," said Lieutenant Colonel Ed Tomme, deputy director, Air Force Tactical Exploitation of National Capabilities.

Some of those disadvantages are that low-earth-orbiting systems can't loiter above one spot, and satellite programs are expensive and generally have a long lead time before capabilities are realized.

"Near-space items in the future will be able to provide persistence for days, weeks and even months," added Tomme. ★

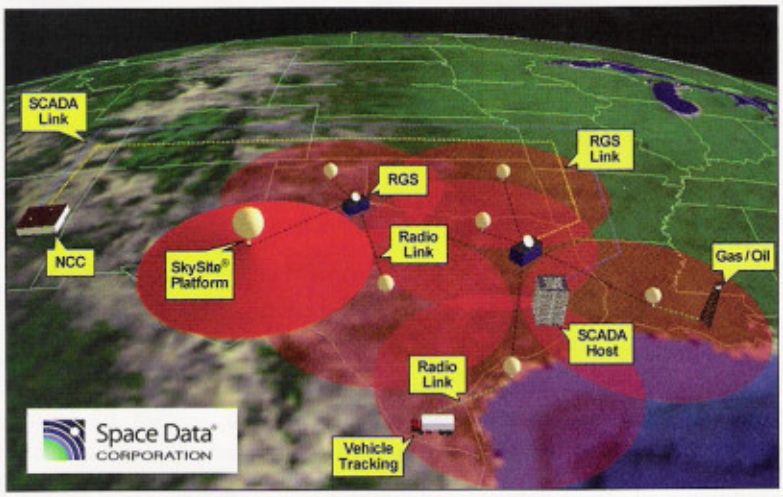
Made of space-age materials and powered by solar powered electrical engines, each Stratellite will reach its final altitude by utilizing proprietary lifting gas technology. Once in place at 65,000 feet the Stratellite can remain in one GPS coordinate, providing the ideal wireless transmission platform. The unmanned Stratellite will have a payload capacity of several thousand pounds and clear line-of-sight to approximately 300,000 square miles, an area roughly the size of Texas. (Sanswire photo)

Contact Editor Harrison Donnelly at harrisond@kerriganmedia.com. For more information related to this subject, search our archives at www.mat-kmi.com.

Compiled by KMI staff

SHORT

Near Space Communications Platform Picked for Joint Force Experiment



The Air Force has awarded Space Data Corp. a $1.4 million contract to participate in the 2006 Joint Expeditionary Force Experiment (JEFX)—a land, sea, and air event that tests the latest war fighting technologies. In March, the Air Force Space BattleLab conducted a series of successful demonstrations using Space Data's technology. Ground-to-ground communications using the same type of radios carried by troops in Iraq and Afghanistan extended the range from 10 miles to 400 miles. Likewise, the Space Data technology significantly improved direct communications between troops on the ground and pilots flying air support. Space Data's commercial communication network platform, known as SkySite, has been deployed across the south-central United States for the past year serving the energy industry. The Air Force dubbed the network of balloon-borne platforms flying 20 miles above the earth as SkySat. The Combat SkySat repeater system represents a low-cost and effective means of extending the range of tactical communications. The Combat SkySat project is part of the BattleLab's "Near Space" initiative—focusing on the area between 65,000 feet and 300,000 feet above the earth.

Contracts Improve Tracking of Potential Air Threats

The Air Force and NORAD have awarded Raytheon Solipsys two follow-on homeland defense contracts that enhance the ability to recognize and track aircraft and other potential airborne threats operating within U.S. airspace. Under the NORAD contract, Raytheon Solipsys installed multiple tactical display framework systems in the Air Warning Center of the Cheyenne Mountain operational complex. The contract was awarded by the Electronic Systems Center, Hanscom Air Force Base, MA, to augment an existing support contract with round-the-clock on-call technical assistance, traditional phone and e-mail support, and on-site legacy system cut-over support. Immediately after the Sept. 11 terrorist attacks, the Air Force asked Raytheon Solipsys to apply its existing Multi-Source Correlator Tracker and Tactical Display Framework products to establish the NORAD Contingency Suite (NCS) system. NCS provides military and government personnel with airborne threat recognition capabilities and facilitates the exchange of time-critical, decision-quality information among supporting agencies and systems. Raytheon Solipsys continues to work with the Air Force and NORAD to optimize the capabilities and reliability of the NCS system.

Navy Orders Standard Missile-3 Rounds for Aegis Missile Defense

The Navy has awarded Raytheon a $124.1 million contract to build, test and deliver additional Standard Missile-3 (SM-3) rounds to the Missile Defense Agency to meet the Aegis Ballistic Missile Defense deployment requirements. This is the first manufacturing contract for the upgraded SM-3 Block IA. Raytheon has already delivered six SM-3 Block I missiles and is on contract to deliver five more. The SM-3 Block IA provides an incremental upgrade to improve missile reliability and supportability at a reduced cost. SM-3 also recently transitioned from engineering development to manufacturing build process and is being built along with production SM-2s in Raytheon Missile Systems' factories in Tucson, AZ, and Camden, AR. Raytheon is responsible for the development and integration of the SM-3, including the SM-3 kinetic warhead, and leads an integrated team that includes Boeing, Aerojet and Alliant Techsystems.

IT Services Contract Supports Air Force ISR Systems

SRA International, a provider of IT services and solutions to federal government organizations, has been awarded a competitive task order to provide IT services to the Air Force deputy chief of staff for air and space operations. SRA will support the planning, management, and maintenance of aircraft operation and air, space, and ground systems. The task order, awarded under the General Services Administration Federal Supply Schedule, has an estimated value of $10.5 million over five years if all options are exercised. The SRA team will provide a full range of technical services for researching and analyzing the Air Force Distributed Common Ground System (DCGS) weapon system and other intelligence, surveillance and reconnaissance (ISR) systems. Services will include program management; systems analysis and engineering support for ISR airborne and ground systems; and communications engineering for the DCGS. The SRA team includes Riverside Research Institute.